

## Ripersia wünni n. sp. (Pseudococcidae)

by

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Recently I received a large number of Ripersias from Mr. HERMANN WÜNN, who during many years has studied the German coccid fauna, and published several papers on it. These insects had been collected by his son on grass roots under stones, in nests of *Lasius alienus*, in the environment of Kirn (on the river Nahe, an affluent of the Rhine on the S.E. side of the Hunsrück Mts.).

The first sample (collected 22.IV.'52) contained a few specimens of *Ortheziola vej dovskyi* Sulc \*), and several Ripersias which belonged to 2 different species.

The first species was similar to *Ripersia formicarii* Newst. or *R. europaea* Newst. The types of these 2 species have still to be compared with each other to decide in how far they are different. *R. formicarii* from Holland (compared with NEWSTEAD's type slides) is very similar to *R. europaea* from Germany as described by SCHMUTTERER (1952) who presented me with some specimens.

The second species in this sample was a *Ripersia* characterized by several quinelocular pores on the ventral side of the cephalothorax of the adult female. As far as I know, this species is an undescribed one; it is described below as *Ripersia wünni* n.sp. in honour of Mr. WÜNN.

Mr. WÜNN later (28.V.'52) sent me a grass plant with several specimens of *R. wünni* which were engaged in egg laying. Their bodies were filled up with full grown embryos, showing all the details of the first stage larvae. In the first sample (collected 22.IV.'52) eggs were not yet visible in the prepared specimens.

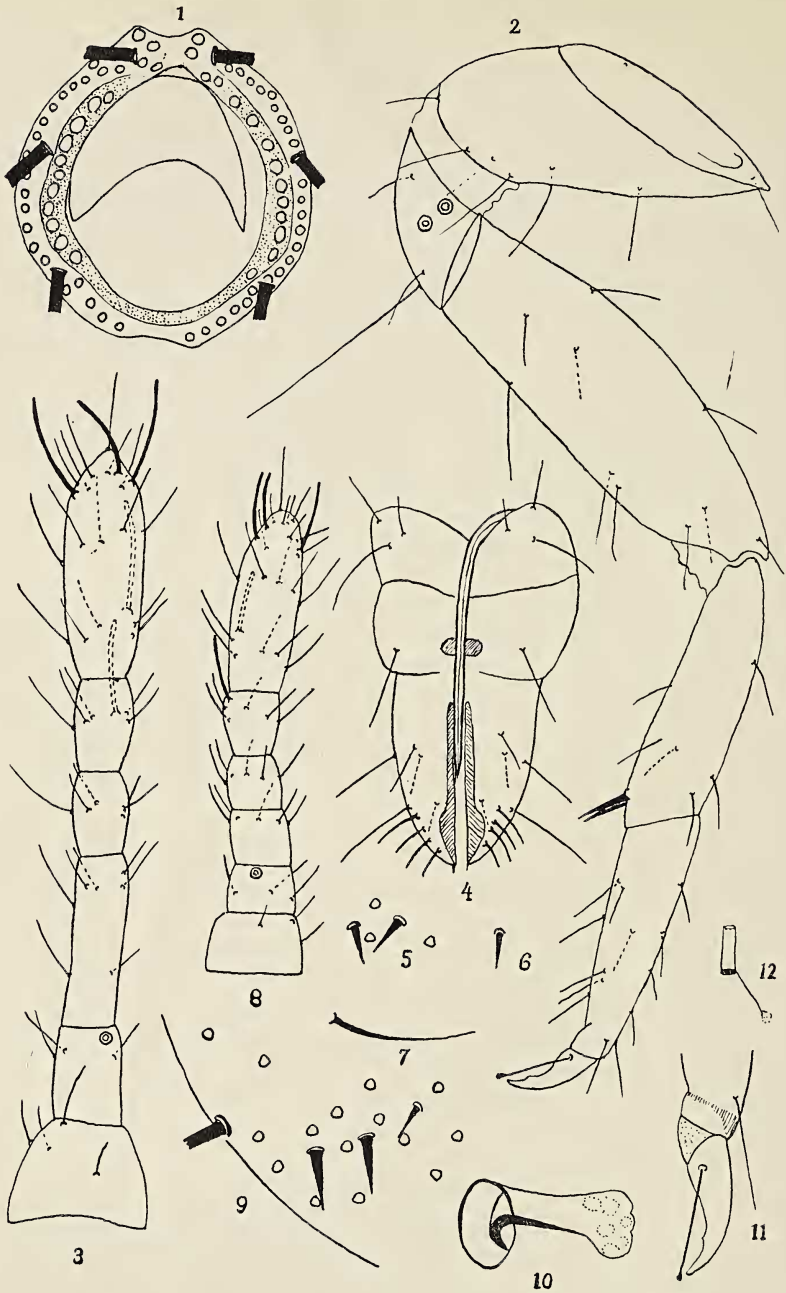
This grass plant contained also some pale yellow globular nodules between the roots at the base of the stem, which at first I had not recognized as being insects. After preparing them it became apparent that they were adult females of the Pseudococcid *Antonina sulcii* Green which had not yet been reported from Germany. The species seems to be widely distributed in Central Europe. Goux (1935) found it in the environment of Lyons and Marseilles, in Savoy and in the Dept. Eure (Lower Seine). BORCHSENIUS (1949) reports it from the Ukraine, the Crimea, and the northern part of the Caucasus. GREEN (1934), who described the species, obtained his material from Czechoslovakia and the Ukraine. \*\*)

### Ripersia wünni n.sp.

Adult female. Pale yellowish or reddish; dimensions of egg laying specimens (as measured on the slide) about 1.9—2.1 × 1.5—1.8 mm. Slightly powdered with wax; the egg laying females produce only very few wax filaments to cover the eggs.

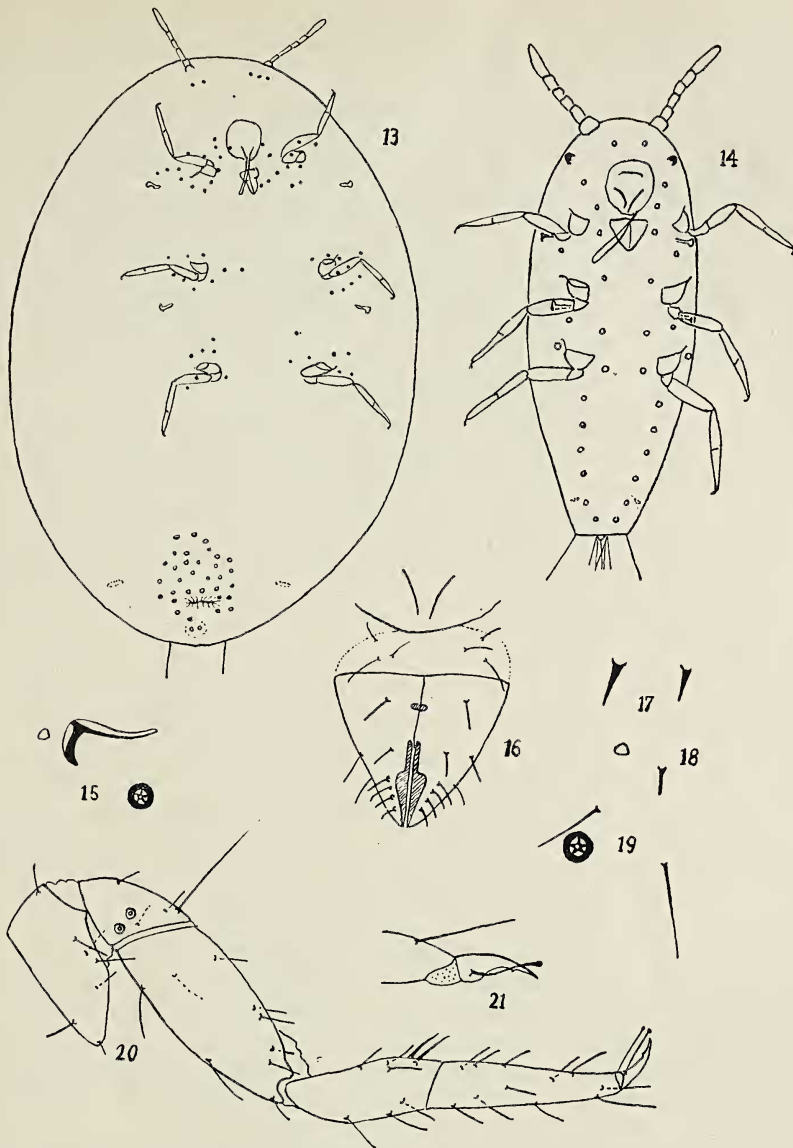
\*) *O. vej dovskyi* Sulc 1894 is probably a synonym of *O. signoreti* (Haller 1880), as is accepted by LINDINGER (1912) and GHESQUIÈRE (1946).

\*\*) Quite recently Mr Wünn has sent me a *Helicococcus* sp. which he had found in the soil after pulling out an Artemisia-plant (near Kirn). This insect is probably *Helicococcus sulcii* Goux, not yet reported from Germany; it is certainly not *H. bohemicus* Sulc or *H. radicolola* Goux.



Antennae 6-segmented, slender, 215—230  $\mu$  in length (fig. 3).

Legs normal (fig. 2). Tibia slightly larger than the tarsus; proportion tibia : tarsus (without claw) = 1 : 0.83—0.87. Claw usually without denticle, but mostly with a small elevation on the inner side which is sometimes shaped like a faint denticle (fig. 11). Tarsal digitules short, sharply pointed. Claw digitules faintly knobbed, as long as or slightly



longer than the claw (fig. 11). The hind coxae are provided with minute warts and folds.

**Labium** somewhat elongate, with blunt tip (fig. 4). Rostral loop short, as long as the labium, when the mouth setae are withdrawn.

**Dorsal side of body.** With trilocular pores and short spine-like hairs (fig. 6). Only the 2 posterior cerarii are developed. The posterior one (on the anal lobes) has 2 distinct spines and a certain concentration of trilocular pores (fig. 9). The penultimate cerarius is little developed, the 2 spines are only slightly larger than the dorsal spines, and there is scarcely any concentration of trilocular pores (fig. 5). Anal lobes obsolete; apical hairs 115—125  $\mu$ . Anal ring with 6 hairs and

2 rows of pores; the inner pores are the largest, and situated in a sclerotized strip (fig. 1). Anal hairs 50—60  $\mu$ . Anterior and posterior ostioles present.

**Ventral side of body.** With hairs (fig. 7) and 4 types of gland pores, viz. tubular gland pores, multilocular, quinquelocular, and trilocular pores. Only a few tubular glands are present on the abdomen (fig. 12), especially near the margin of the posterior end of the body (usually 2 behind the anus, and 3—5 on each of the anal lobes). In one case 28 tubular glands were counted on the abdomen, but generally the number was much smaller (examined 25 adult females). The multilocular pores are confined to the environment of the genital fissure, on the 3 last abdominal segments (fig. 13); they have 12 loculi, their diameter is 6—7  $\mu$ . Several quinquelocular pores are present on the cephalothorax, but their number and position is somewhat variable. These pores are easily overlooked, when they are covered by the legs, or lying in folds and seen from the side. In 3 specimens, which were carefully examined, 55, 64 and 96 quinquelocular pores were counted. Usually there are 1—3 at the base of each antenna, and 8—16 near the place of attachment of each leg (fig. 13). The diameter is about 5  $\mu$  in the quinquelocular and 2.5  $\mu$  in the trilocular pores, so that they can be easily distinguished by their size, even in lateral view. Spiracles normal (fig. 10), without any accumulation of gland pores.

**First stage larva.** Length about 0.6 mm. Antenna 6-segmented (fig. 8); length 130—145  $\mu$ . In the legs (fig. 20) the tibia is somewhat shorter than the tarsus; proportion tibia : tarsus (without claw) = 1 : 1.15—1.35. The claw is provided with a faint denticle (fig. 21); digitules are as in the adult female. The labium has the shape of an equilateral triangle (fig. 16); rostral loop about twice as long as the labium, reaching the line of the middle legs. The dorsal side of the body is provided with small spines and trilocular pores (fig. 18). The 2 posterior cerarii are represented by a pair of spines larger than those on the dorsum (fig. 17). Two pairs of conspicuous ostioles are present. Anal hairs 45—55  $\mu$  long, apical hairs on anal lobe 65—75  $\mu$ . The ventral side of the body is provided with hairs (fig. 19) and 32 quinquelocular pores, the position of which is shown in fig. 14. Fifteen specimens were examined; in 7 of them the posterior pair of quinquelocular pores (on the anal lobe segment) was absent so that the total number was 30. Each spiracle is associated with a quinquelocular pore (fig. 15) which is not the case in the adult female.

The adult female of *Ripersia wünni* differs from the type species *R. corynephorii* (as described by REYNE 1951), by the presence of many quinquelocular pores on the ventral side of the cephalothorax, further by its antennae, labium, and anal ring. The first stage larva of *R. wünni* has a quinquelocular pore outside the hind coxae which is absent in the same stage of *R. corynephorii*, and the proportion of the lengths of the anal hairs and apical hairs is different (*R. wünni* 1 : 1.5 *R. corynephorii* 1 : 3).

The holotype and allotypes of *R. wünni* are deposited in the Zoological Museum at Amsterdam.

## References

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## Explanation of figures

*Adult female.* 1 = Anal ring, 640 ×. 2 = Fore leg, 440 ×. 3 = Antenna, 440 ×. 4 = Labium, ventral side, 440 ×. 5 = Penultimate cerarius, 640 ×. 6 = Spine on dorsal side of body, 640 ×. 7 = Hair on ventral side of body, 640 ×. 8 = Antenna of larva. 9 = Posterior cerarius, with base of apical hair on the anal lobe, 640 ×. 10 = Anterior spiracle, 440 ×. 11 = Claw (dotted part membranous), 640 ×. 12 = Tubular gland on anal lobe, 640 ×. 13 = Position of quinquelocular pores (dots) and multilocular pores (circlets) on the ventral side of the body, 45 ×.

*First stage larva.* 8 = Antenna, 440 ×. 14 = Position of quinquelocular pores on the ventral side of the body, 90 ×. 15 = Spiracle with quinquelocular pore, 440 ×. 16 = Labium, ventral side, 440 ×. 17 = Spine of the posterior cerarius (at left), and of the penultimate cerarius (at right), 640 ×. 18 = Spine on dorsal side of body, 640 ×. 19 = Hairs and quinquelocular pore on ventral side of body, 640 ×. 20 = Fore leg, 440 ×. 21 = Claw (dotted part membranous), 640 ×.

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## Literatuur

Wagner, E., *Blindwanzen oder Miriden*, deel 41 van „Die Tierwelt Deutschlands“, Verlag Gustav Fischer, Jena, 1952.

Dit werk, het eerste van de serie, dat na de oorlog uitgekomen is, behandelt alle Miriden van Midden-Europa, waarbij de Noordgrens van het verspreidingsgebied op 56° N.B. en de Westgrens op 6° O.L. is genomen. Hoewel dus voor Nederland alleen onze Oostelijke provincies hieronder begrepen zijn, noemt WAGNER bij de opgave van de verspreiding van zeldzame dieren ook die, welke elders in Nederland gevonden werden.

Natuurlijk zijn bij de bespreking van specifiek Nederlandse soorten enkele foutjes ingeslopen. Zo is b.v. *Polymerus holosericeus* Hhn. wel, *Brachyarthrum limitatum* Fieb. daarentegen niet een Nederlandse soort.

Geconstateerd mag worden, dat we hier een determinatiewerk voor ons hebben, dat aan alle eisen van de moderne systematiek voldoet. De nieuwste nomenclatuur is verwerkt. Opmerkelijk is, dat de genera anders zijn gerangschikt dan tot nu toe gebruikelijk was, zodat in het systeem der Miriden nu *Bryocoris* en *Monalocoris* vooraan gaan.

Het geheel is verlicht met uitstekende, zeer fijne tekeningen van genitaalpraeparaten, belangrijke onderdelen, alsmede met overzichtsafbeeldingen van de verschillende insecten.